

## **RESPONSE AND REQUEST FOR RECONSIDERATION**

In response to the Office Action of February 1<sup>st</sup>, 2006, Applicants hereby request the Examiner to reconsider the claims in view of the following amendment and remarks.

### Information Disclosure Statement

Applicants acknowledge that the Examiner has not considered the reference UK 1,571,652 entitled "Improved Fibre Optics T-Coupler" because it does not appear relevant.

### Specification

The Examiner has indicated that the current title is not descriptive and has proposed a new title. The title proposed by the Examiner is: "Oil-in-Water Emulsions and a method of Producing". Applicants agree to the title proposed by the Examiner.

The Examiner has objected to the abstract because of the legal phraseology "comprising". The Examiner has also indicated that the phrase "an emulsified greases" is grammatically incorrect because greases is plural. In view of the objections to the abstract Applicants have provided on a replacement page a new abstract written as follows:

The invention relates to a novel emulsified composition containing (a) major amount of an aqueous phase, (b) a minor amount of an organic phase (c) a thickener and (d) a minor but effective amount of at least one emulsifier to emulsify the aqueous and organic phase resulting in a water in oil emulsified composition, in particular emulsified greases and emulsified coatings. Further, the present invention provides a process for making the emulsified composition.

The Examiner has also highlighted on page 1, line 4 that USSN 10/154,276 should be replaced with US Patent 6,933,263; and on page 14, line 23 USSN 09/761,482 should be replaced with US Patent 6,419,714. Applicants have attached replacement pages 1 and 14 with the required changes.

In view of all of the changes to the specification, Applicants submit that the specification now meets all of the formal requirements.

## Claim Amendments

### Independent Claims

Applicants have amended independent claim 1 to specify that the emulsified composition contains at least one thickener; and the emulsifier comprises a surfactant with a hydrophilic lipophilic balance (HLB) less than 9. Support for this amendment is found in claim 3 (at least one thickener) and claim 14 (HLB of less than 9) of the application as filed.

Claim 22 has been amended in a similar way to claim 1. Support for the amendment is given in claim 3 and 14.

Applicants submit that the amendments to claim 1 and 22 do not add new subject matter.

Applicants submit that the amendment to specify that the emulsifier does not result in a lack of clarity over the emulsifier definition (iii) i.e., “any other ionic or a nonionic compound having a hydrophilic-lipophilic balance (HLB) of about 1 to about 40”. The claim does not lack clarity and is definite because on page 12, lines 10 to 13 of the specification, states that “Surfactants with HLBs higher than 9 can be used provided they are combined with lower HLB surfactants to give a composite emulsifier system with an HLB in the range that produces water in oil emulsions.”

### Dependent Claims

Applicants have amended claims 2, 4, 5, 7, 8, 10, 11, 12, 13, 16, 17, 18, 20 and 22 to overcome the claim objections highlighted by the Examiner. The amendments made to these claims are as suggested by the Examiner.

### Cancelled Claims

In view of the amendments highlighted, Applicants further cancel claim 14 and 23 without prejudice.

### New Claim

Applicants have added a new claim 25. Claim 25 specifies that the emulsifier has a HLB of 0 to 7. Support for the new claim is found in the specification on page 12, line 4 to 12 which state:

“Low hydrophilic lipophilic (sometimes called lyophilic) balance (HLB) surfactants are employed within a range of less than or equal to HLB 9.0, preferably HLB of 0 to 7”.

### Claim Objections

The Examiner has made a number of claim objections for a number of informalities. In view of the claim amendments discussed above, Applicants submit that the claims submitted with this response have rectified all of the informalities highlighted by the Examiner.

### Double Patenting

The Examiner has rejected claims 1, 2, 4-11, 14, 19 and 20-24 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of US 6,933,263 (Manka). The Examiner is of the position that claims 3, 12, 13 and 15-18 are novel over Manka.

In view of Applicants amendment to claim 1 of the present invention by specifying the requirement for a thickener (original claim 3 of the present invention), Applicants submit that the amended claim is novel over Manka.

Applicants further declare under 37 CFR 1.78(c), that the present invention and that disclosed in Manka were commonly owned at the time of the present invention was made.

In view of the fact that the Manka invention and the present invention were commonly owned at the time the present invention was made precludes a rejection under 35 U.S.C. 103(a). Therefore Applicants submit that no 35 U.S.C. 103(a) arguments are required.

### 35 U.S.C. 112 Rejection

The Examiner has rejected claims 1-24 under 35 U.S.C. 112, second paragraph.

The Examiner has rejected claim 1 as being indefinite because in element (vii) when  $n=0$ ,  $R=H$  and  $R'''=H$ , structures vii-1 and vii-2 represent the structure for water, which results in the emulsified composition comprising only water and oil without any definitive emulsifier. Applicants have deleted without prejudice the  $R$  term "independently hydrogen". The amendment means that when  $n=0$ , structures vii-1 and vii-2 do not define water.

The Examiner has rejected claims 1, (ix), 3 and 12 because the phrase "such as" renders the claim indefinite. Applicants have amended claims 1, 3 and 12 by deleting the phrase "such as".

Applicants submit that all claims meet the requirements of 35 U.S.C. 112, second paragraph. Therefore Applicants request the Examiner to remove the 5 U.S.C. 112, second paragraph rejection.

35 U.S.C. 102 Rejection

The Examiner has indicated that claims 1, 2, 4-6, 8, 10, 11, 14, 18-20 and 22-24 of the present invention lacks novelty under 35 U.S.C. 102(e) in view of Lorant (US202/0045670).

The Examiner has indicated that claims 1, 2, 4-6, 8, 10, 11, 14 and 18-21 of the present invention lacks novelty under 35 U.S.C. 102(b) in view of Lorant (US202/0045670).

Applicants' currently amended claim 1 specifies that the emulsifier comprises a surfactant with a hydrophilic lipophilic balance (HLB) of less than 9. In contrast Lorant requires that the emulsifier has a HLB of 9 to 18.

Applicants' currently amended claim 1 further specifies that the emulsified composition contains at least one thickner.

Applicants submit that the amended claim 1 submitted with this response is novel over the Lorant rejections under both 35 U.S.C. 102(b) and 35 U.S.C. 102(e).

35 U.S.C. 103(a) Rejections

Applicants submit that the present invention meets the requirements of 35 U.S.C. 103(a) in view of Lorant. Lorant discloses an oil-in-water emulsion suitable for cleansing and care of skin. The oil-in-water emulsion of Lorant is disclosed as containing 10-30 % of at least one cosmetic oil, 2-10 % of at least one non-ionic emulsifier having an HLB of 9 to 18, 5-15 % of at least one foaming surfactant and 40-60 % water. In contrast the present invention specifies that the emulsified composition is a water-in-oil emulsion and the emulsifier (as defined by elements (i)-(xi) of the present invention) has a HLB of less than 9 and contains at least one thickner. Given that Lorant teaches oil-in-water emulsions and does not teach, suggest or otherwise disclose water-in-oil emulsions containing at least one thickner, a person skilled in the art would have no expectation that the emulsifiers defined by Applicants in (elements (i)-(xi) would be suitable for forming a water-in-oil emulsion. Applicants have unexpectedly discovered that water-in-oil emulsions are formed with the emulsifiers defined by elements (i)-(xi) and that the emulsifier has a HLB of less than 9. Hence,

Applicants submit that the present invention is unobvious over Lorant and meets the requirements of 35 U.S.C. 103(a).

The Examiner has rejected claim 7 as being unpatentable over Lorant as applied to claims 1, 2, 4-6, 8, 10, 11, 14, 18-20 and 21-24, in view of Stern (US 2,466,647).

The Examiner has rejected claims 12 and 15-17 as being unpatentable over Lorant as applied to claims 1, 2, 4-6, 8, 10, 11, 14, 18-20 and 21-24, in view of Koch et al. (US 2005/0120619).

The Examiner has rejected claims 1, 2, 4, 6, 9, 12 and 15-17 under 35 U.S.C. 103(a) over Lange et al. (US 6,020,291) in view of Koch.

The Examiner has rejected claim 13 under 35 U.S.C. 103(a) as being unpatentable over Lange, in view of Koch as applied to claims 1, 2, 4, 6, 9, 12 and 15-17, and further in view of Filippini et al. (US 2004/0111957).

The Examiner has rejected claim 13 under 35 U.S.C. 103(a) as being unpatentable over Lorant as applied to claims 1, 2, 4-6, 10, 11, 14, 18-20 and 21-24 in view of Filippini.

The Examiner has rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over Lange in view of Koch as applied to claims 1, 2, 4, 6, 9, 12, and 15-17, and further in view of Karol (US 5,026,865).

Applicants submit that the present invention is unobvious in view of:

- (a) Lorant in view of Stern;
- (b) Lorant in view of Koch; and
- (c) Lorant in view of Filippini,

because of the technical differences discussed above between Lorant and the present invention. Specifically, Lorant discloses oil-in-water emulsions containing 10-30 % of at least one cosmetic oil, 2-10 % of at least one non-ionic emulsifier having an HLB of 9 to 18, 5-15 % of at least one foaming surfactant and 40-60 % water. In contrast the present invention specifies that the emulsified composition is a water-in-oil emulsion and the emulsifier (as defined by elements (i)-(xi) of the present invention) has a HLB of less than 9 and contains at least one thickner. A person skilled in the art would have no expectation or motivation to combine Lorant with Stern, Koch or Filippini as indicated by (a) to (c) above. The skilled person would have no expectation that combinations (a) to (c) would result in the present invention because the emulsions of Lorant are oil-in-water systems that require a emulsifier with a HLB of 9 to 18. As a

result any combination involving Lorant would result in a water-in-oil emulsion. In contrast the present invention is an oil-in-water emulsion containing at least one thickener. Therefore Applicants request the Examiner to remove the 35 U.S.C. 103(a) based on (a) to (c) above.

Applicants submit that the present invention is unobvious in view of:

(d) Lange in view of Koch;

(e) Lange in view of Koch and further in view of Filippini; and

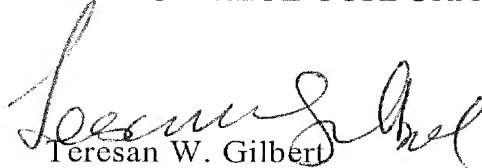
(f) Lange in view of Koch and further in view of Karol,

because the amendment to claim 1 of the present invention specifies that the emulsifier has a HLB of less than 9 and the emulsified composition further contains at least one thickener i.e. requirement as defined in original claims 3 and 14. Since the Examiner has not rejected original claim 14 in view of (d) to (f) above, the current amendment obviates the Examiners rejections based on (d) to (f) above. Therefore Applicants request the Examiner to remove the 35 U.S.C. 103(a) based on (d) to (f) above.

Applicants respectfully request a one-month extension of time in response to the office action dated February 1, 2006, 2006 to June 1, 2006. Enclosed is the one-month Petition and Fee for Extension of Time with the required fee of \$120.00. The Commissioner is authorized to charge said fee to The Lubrizol Corporation Deposit Account No. 12-2275. Any additional fees or overpayment of fees should be charged or credited to the same deposit account.

Respectfully submitted,

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